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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/749,006

12/30/2003

Ellen Lasch

37355-169

8389

7590

05/24/2006

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EXAMINER

MAI, THIEN T

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/749,006             | LASCH ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Thien T. Mai           | 2876                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to:
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/2006</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Acknowledgment*

Acknowledgment is hereby made of the amendment filed 03/24/2006. Claims 1-25 remain under prosecution and are presented herein.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim(s) 1-14, 18-20 and 22 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453) in view of Roberts (6025283).

Conner discloses a transaction card comprising:

- a first layer of metal position at bottom of the transaction card (Specification par. 0011);
- a recordable medium for storing information such as a chip **11** (Fig. 1) circular disk (Fig. 27-29) or magnetic strip affixed to the back the card (Specification par. 0011), inherently implies being disposed on the first layer of the metal;
- a second plastic layer comprising of two layers upper and middle (Specification par. 0011), adjacent and laminated to the metal layer (Specification par. 0079), which is made of PVC (Specification par. 0070), known in the art as thermoplastic polyvinyl material

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wherein the metal layer is made of titanium (Specification par. 0076) or 300 series stainless steel (Specification par. 0070, 0076), which is on the bottom (Specification par. 0011) of the card and thus provides a surface for the transaction card.

Conner does not suggest the first metal layer to comprise embossed characters.

Roberts discloses a card having a precious metal layer such as gold. Roberts doesn't expressly mention precious metals include titanium; however, titanium is known for its expensiveness and is therefore considered a precious metal. The characters representing account numbers and/or name are embossed onto the metal layer, which is done by laser etching techniques. See reference text below:

*Laser etching is used to etch the gold to high definition and, optionally, the signature of the user may be laser etched or provided in the conventional manner by a signature patch and photograph. The account numbers and name of the card holder are embossed onto the gold layer. Advantageously, to conform with ISO standards, the card can be milled out to provide a recess of 600 micron to accommodate SMART card technology and can thereafter be embossed. The recess could be provided by milling using conventional mechanical technology or laser etching, or by forming an aperture in the layers prior to lamination. Tests have shown that the peel strength is an important factor if the card is to meet the required ISO, European and British standards. The number 11*

*attached to the card, the dates 12,13 of first validity and expiry and the name 14 of the card owner are all embossed into card.*

*Prior to-coating, due to the use of precious metals, the cards are assayed at the Assay Office in the United Kingdom or at the appropriate office in other countries.*

*The brand 15 of the particular type of card is etched onto the gold layer of the card prior to coating or printed onto the plastic cover by screen printing and laser etching or stamping. The magnetic strip 16 is attached to the rear of the coated card using adhesive. A signature patch 17 for the authorised signature of the card owner is likewise attached to the rear of the card using adhesive. It is conventional to secure holograms to charge cards in order to prevent forging. Such a hologram 18 may be secured in place on the coated card by adhesive as described (col. 4 lines 42+).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roberts to the metal layer of Conner since the incorporation would prolong the information embossed on the metal layer.

Regarding claim(s) 9 and 13, Conner discloses the magnetic strip is affixed to the back of the card, inherently implies the affixation is adjacent to the metal layer. Conner further mentions an affixation is accomplished by glue (Specification par. 0072), which inherently implies an adhesive layer being deposited already in order to glue/affix the stripe.

Regarding claim(s) 10, 12, and 14, Conner discloses all layers of the transaction card can alternately be made all of titanium layers or alloys or other metals (Specification par. 0076). As the result, the middle layer 33 or 6, interpreted as being the first layer of metal, is adjacent to the bottom being the second layer of substrate and the second layer is already proven in claim 9 for having an adhesive layer onto which the magnetic stripe is affixed (see discussion regarding claim 9).

Regarding claim(s) 20, Conner discloses the metal layers further include a cavity in which a chip 11 is embedded (Fig. 12).

Regarding claim(s) 22, Conner discloses the layers making up the transaction card can alternately be made all of titanium layers or alloys or other metals (Specification par. 0076) and the thickness of the card is desired to be compliant with ISO-7816 standard thickness of .031 inches (or 30 mils) (Specification par. 0068-69). Accordingly, the total thickness of the metal layer of the card in this embodiment is about 30 mils thick.

3. Claim(s) 15-17 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283), further in view of Kaminsky (20040121257).

Regarding claim(s) 15-17, Conner discloses all limitations set forth in this claim as discussed above except a surface coating that is made of polyethylene terephthalate material and comprises a dye for providing color to the card. Kaminsky discloses a transaction card with a metal layer 16 coated on the surface with a colored dye donor layer made of polyethelene terephthalate (Specification par. 0078, 0091).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the color dye of Kaminsky into Conner's invention with the motivation for the desire for manufacturing cards with different colors for different financial institutions.

4. Claim(s) 21 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283), further in view of Hinata (20030202151).

Regarding claim(s) 21, Conner discloses all limitations set forth in this claim as discussed above except an oxide layer on a surface of the metal layer being formed from an anodizing process. Hinata discloses such technique is known in the art. See reference text below:

"The insulator 66 is fabricated of tantalum oxide ( $\text{Ta.sub.2O.sub.3}$ ) that is obtained by oxidizing the first metal layer 65 through anodizing. When the first metal layer 65 is anodized, the surface of the first layer 79a of the line wiring 79 is also oxidized. Similarly, a second layer 79b fabricated of tantalum oxide is thus formed." (Specification par. 0133)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize anodizing technique to achieve bonding thus preventing the metal layer from peeling off.

5. Claim(s) 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283), further in view of

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Makishima (3468046) and Biller (20030150762). The teachings of Conner/Roberts have been discussed above.

Regarding claim(s) 23, Roberts discloses a card having a recessed pocket from which embossed characters are protruded by the embossing process so that the thickness of the card conforms with ISO standard thickness. See the following text:

“Advantageously, to conform with ISO standards, the card can be milled out to provide a recess of 600 micron to accommodate SMART card technology and can thereafter be embossed.” (col. 4 lines 46-49)

Conner-Roberts combination still fails to teach or reveal a filler panel being disposed within the pocket. However Makishima discloses card having a light filter 3 with translucent film 4, made so that the signature is invisible light in the visible spectrum but visible under ultraviolet light, is inserted to fill the pocket having indicia such as character signature in it (col. 3 lines 33-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use a fill panel such as of Makishima with the motivation for the desire for further security for the transaction card.

Regarding claim(s) 24, Conner-Roberts-Makishima together still fails to teach an adhesive layer being disposed within the pocket to adhere the fill panel covering indicia. However, Biller discloses a label, interpreted as the fill panel, is used to adhere using adhesive material and cover indicia on the card (see Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention use a fill panel



such as of Biller's to cover indicia such as account number or signature area for security protection purposes.

6. Claim(s) 25 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283), further in view of Hara (US Patent 4,876,441, Hara'441 hereafter). The teachings of Conner/Roberts have been discussed above.

Regarding claim(s) 25, Conner discloses all limitations set forth in this claim as discussed above except for the transaction card to have chamfer edges around the perimeter of the card. Hara'441 discloses chamfering edges are provided around the perimeter for protection of the core portion which houses peripherals (col. 11 lines 11-35, Fig. 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to be motivated to utilize Hara's invention to further protect the electronics inside such as chip and to avoid incidents caused by sharp and non-chamfered edges.

### **Remarks**

7. The rejection under 35 USC § 112, second paragraph, is lifted per Applicants' amendment.

8. Applicant's arguments filed 3/24/2006 have been fully considered but they are not persuasive.

9. On pages 5-6, Applicants assert that:

*With respect to the rejection of independent claim 1 under 35 U.S.C. j 102(e) as being anticipated by Conner et al., Applicants respectfully submit that the claims, as amended, define the invention over Conner et al or any other cited reference of record,*

*taken alone or in combination. More specifically, independent claim 1 has been amended to define a first layer of metal wherein said first layer of metal comprises embossed characters. This feature is nowhere disclosed in Conner et al., or any other reference of record. FIGS. 12, 13 and 15 of Conner et al. show an embodiment illustrating embossed characters protruding from a surface of a transaction card. However, neither these figures, nor the description of these figures in the specification of Conner et al. discloses or teaches a metal layer comprising the embossed characters, as defined in independent claim 1. Specifically, Conner et al. states, "The top layer 28 is fabricated from about 0.0055 inch thick material and has characters 30 embossed as shown in FIGS. 12, 13 and 15." Para. 0079, lines 8-10. Further, Conner et al. state, "GGAJI alternative construction is to make layer 28 of plastic and print the artwork with a die sublimation process." Para. 0080, lines 9-10. These citations represent the only description of materials utilized in the construction of layer 28. Nowhere does Conner et al. indicate that layer 28, having the embossed characters disposed therein, is metal. As noted above, the only material disclosed is plastic, which is well-known in the art of making transaction cards. Since Conner et al. fail to teach or disclose the elements defined in amended independent claim 1, the rejection thereto has been overcome and, respectfully, should be withdrawn. Claims 2-25 depend from independent claim 1. These claims are further believed allowable over the references of record for the same reasons set forth above with respect to their parent claims since each sets forth additional structural elements of Applicants' novel transaction card.*

The Examiner respectfully agrees with Applicants that reference Conner is not clear as to whether the claim limitation "first layer of metal comprises embossed characters" is being taught therein. However, further careful reading of cited reference

Roberts (US Patent 6,025,283) indicates such embossed metal layer is known as also discussed above. Therefore the rejections on the claim limitations, not Applicants' instant invention as a whole, are respectfully maintained.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US Patent Publication of Kaul (20020117846) discloses a transaction card having an embossed layer comprising at least a metal layer of Titanium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien T. Mai whose telephone number is 571-272-8283. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thien T Mai  
Examiner  
Art Unit 2876

TM

5/17/2006

  
**THIEN M. LE**  
**PRIMARY EXAMINER**